

REMARKS

Claims 1 to 4 and 6 to 16 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The Examiner has approved the drawing corrections to Figure 5a proposed on January 10, 2003. Applicant has attached a corrected drawing sheet which includes corrected Figure 5a in accordance with the Office Action's request for a corrected drawing. The corrected Figure 5a was revised to include the reference number "20".

SPECIFICATION

Applicant gratefully acknowledges that the Office Action does not object to the changes to the specification made in the Response filed on January 6, 2003.

REJECTION UNDER 35 U.S.C. § 112

Claim 1 stands objected to as containing certain informalities. This rejection is respectfully traversed.

Applicant has amended claim 1 to eliminate the word "characterised." Accordingly, Applicant respectfully requests that the objection to claim 1 be withdrawn.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 to 4 and 7 to 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by van Laere (U.S. Pat. No. 4,905,423). This rejection is respectfully traversed.

Applicant has amended claim 1 to include the limitations of claim 5. Insofar as the Office Action did not reject claim 5 under 35 U.S.C. § 102(b), Applicant respectfully requests that the 35 U.S.C. § 102(b) rejection of claim 1 be withdrawn. Since claims 2 to 4 and 6 to 10 depend from claim 1, Applicant also respectfully requests that the 35 U.S.C. § 102(b) rejection of claims 2 to 4 and 6 to 10 be withdrawn.

For similar reasons as those set forth above, Applicant respectfully requests that the 35 U.S.C. § 102(b) rejection of independent claim 11 (amended to include the limitations of claim 17) and the claims dependent thereon, claims 12 to 16, be withdrawn. Applicant notes that the Office Action did not reject formerly dependent claim 17 wherein the Applicant claimed the gear mechanism(s) comprising an epicyclic gearbox. Additionally, the Office Action admits in section 7 that van Laere does not explicitly show an epicyclic gearbox. However, with reference to claim 17 (in the last paragraph of section 5 of the Office Action), the Office Action asserts that van Laere anticipates the gear arrangements including an epicyclic gearbox. Applicant has made a diligent search of van Laere and finds no description of an epicyclic gear mechanism.

In contrast to the claimed invention, van Laere describes the gears 216 and 220 as bevel gears (see column 36, lines 62 and 65) and a pinion gear 73 engaging a larger spur gear 74 (see column 20, line 55 and column 21, lines 59 to 60). Moreover, Figures 38 and 1, for example, illustrate these gears in a manner inconsistent with epicyclic gear

mechanisms. Accordingly, van Laere fails to anticipate the claimed second gear arrangement disposed within the attachment and including an epicyclic gear mechanism as set forth in independent claim 11 (amended to include the limitations of claim 17). For the reasons set forth above, Applicant respectfully requests that the 35 U.S.C. § 102(b) rejection of claim 11 and the claims dependent thereon, claims 12 to 16, be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over van Laere (U.S. Pat. No. 4,905,423) in view of Strohmaier (U.S. Pat. No. 4,222,738). This rejection is respectfully traversed.

As discussed at MPEP 2142, a prima facie case of obviousness requires the satisfaction of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The art relied upon by the Examiner to reject dependent claim 5 (the limitations of which are now incorporated into dependent claim 1) under 35 U.S.C. §103 fail to establish a prima

facie case of obviousness for three reasons. These three reasons are discussed immediately below.

1. There is no Suggestion or Motivation to Combine the References

There is no suggestion or motivation to combine the references relied upon by the Examiner to reject the subject matter of claim 5 under 35 U.S.C. §103. Applicant notes that van Laere is directed to a power tool powerful enough for heavy duty work (see column 3, lines 11 to 12). Moreover, the van Laere power tool has a power of at least 620 watts (see column 3, line 44). By way of illustration, the van Laere tool may be used to remove severely jammed automobile wheel nuts (see column 4, line 60 to 61) with 500 gram (1.1 pound) impact hammers (see column 15, lines 27 to 31). Accordingly, van Laere suggests combinations capable of transmitting relatively large quantities of power.

In sharp contrast to van Laere, Strohmaier is directed to an elongated dental hand piece (see column 1, line 10 to 11). Accordingly, Strohmaier suggests low power, dental instruments capable of the precision necessary to avoid injuring quite sensitive patient tissues (e.g., tooth nerves). The teachings of Strohmaier are incompatible with the 620 watt impact tool of van Laere. The suggested combination of van Laere and Strohmaier would impermissibly require a substantial reconstruction and redesign of the elements shown in van Laere as well as a change in the basic principle (high power vs. low power) under which the van Laere construction was designed to operate. In re Ratti, 270 F.2d 810, 813 (CCPA 1959) ("suggested combination of references would require substantial reconstruction and design of the elements shown in [the primary

reference] as well as a change n the basic principle under which the [primary reference] construction was designed to operate.").

2. There would have been No Reasonable Expectation of Success

There would have been no reasonable expectation of success in combining van Laere and Strohmaier. As set forth above, van Laere is directed to a high power hand tool, while Strohmaier is directed to a precision dental instrument. Combining the precision components taught by Strohmaier with the high power components of van Laere would likely destroy the medically precise components of Strohmaier. For instance, the transmission of Strohmaier includes a hollow trunnion extension connected to a drive shaft (column 5, lines 43 to 48) which, if used to transmit even a modest fraction of 620 watts of power, would twist or buckle. Accordingly, because there is no reasonable expectation of success, the proposed combination necessarily fails to establish a prima facia case of obviousness.

3. The Prior Art References Fail to Teach or Suggest All the Claim Limitations

The combination of van Laere and Strohmaier fails to teach or suggest all of the limitations recited in amended claim 1. In this regard, applicant notes that the Office Action concedes that van Laere does not explicitly show an epicyclic gearbox. The Office Action, however, asserts that Strohmaier teaches the use of an epicyclic gearbox. Applicant respectfully submits that the Examiner has misinterpreted the teachings of Strohmaier. Because the vibration of a dental tool causes the sharp tooth pain associated with dental operations, motor driven dental tools (such as those taught by Strohmaier) seek to isolate the tip of the dental tool from sources of vibration such as

gear mechanisms. Thus, the dental tool of Strohmaier in fact teaches away from an attachment having an epicyclic gear mechanism.

Applicant has also searched Strohmaier diligently without finding a teaching of an epicyclic gear mechanism in an attachment. Strohmaier in fact teaches away from the present invention by disclosing an attachment with an elongated shaft. Such an elongated shaft is consistent with objectives of the dental art (e.g., to reach into the mouth) and is in contrast to a primary objective of the subject invention of making the tool compact. Because both van Laere and Strohmaier fail to teach or suggest an element of the claimed attachment having an epicyclic gear mechanism, the Office Action necessarily fails to establish a *prima facia* case of obviousness.

Moreover, while the Office Action asserts that Strohmaier teaches the claimed speed reduction through gear ratios, Strohmaier performs a step down in transmission ratio (see column 7, lines 23 to 27). In contrast, claim 5 recites a change in rotational speed as between the input and output of the gear mechanism instead of a transmission step down. Additionally, Strohmaier performs the transmission ratio step down by the way of cooperation of the interengaging means 16, 17 and counter-engaging means 18, 19 (see column 7, lines 33 to 34) whereas amended claim 1 recites the epicyclic gear mechanism for causing a change in rotational speed as between the input and output.

Moreover, Strohmaier teaches imparting different speeds to the transmission (see column 7, line 33) as opposed to the recital in amended claim 1 of transmitting a rotational speed from the input shaft to the output shaft. Because of the differences between the teachings of Strohmaier and the recitals in amended claim 1, and because

of the silence of van Laere, Applicant respectfully requests that the 35 U.S.C. § 103(a) rejection of claim 5 be withdrawn.

The remaining art of record similarly fails to teach or suggest the invention defined by amended claim 1.

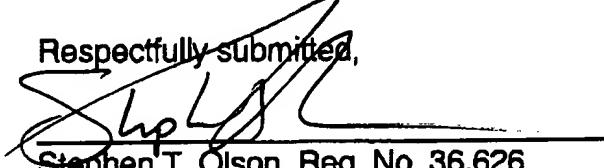
Accordingly, Applicant respectfully submits that independent claim 1 and claims 2-4 and 6-10 dependent therefrom are in a condition for allowance.

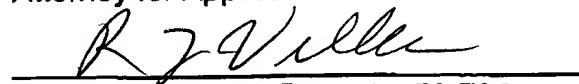
Amended claim 11 similarly recites a second gear arrangement disposed within the attachment including an epicyclic gear mechanism. For the reasons discussed above with respect to claim 1, Applicant respectfully submits that claim 11 and claims 12-16 dependent therefrom are in a condition for allowance

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,


Stephen T. Olson, Reg. No. 36,626
Attorney for Applicant


Robert L. Villhard, Reg. No. 53,725
Attorneys for Applicant

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600